

REMARKS/ARGUMENTS

Claims 1, 3 to 5, 7 to 10, 12 to 14, 16, 19, 20, 23, 26 and 28 to 34 remain in this application. Claims 2, 6, 11, 15, 17, 18, 21, 22, 24, 25 and 27 have been cancelled, without prejudice, to presenting in a continuing application.

The Examiner has maintained the rejection of claims 1, 7, 8, 10 and 12 as being obvious over Kupitis US Patent No. 3,129,194 ("Kupitis") in view of Eiden US Patent No. 4,336,293 ("Eiden") in paragraph 4 on page 2 of the Office Action mailed January 24, 2006 ("the latest Office Action") for the reasons set forth in paragraph 7 on pages 4 and 5 of the Office Action mailed June 13, 2005 ("the previous Office Action"). In paragraph 19 on pages 12 to 14 of the latest Office Action, the Examiner responded to the arguments filed on November 9, 2005.

In rejecting claims 1, 7, 8, 10 and 12 over Kupitis in view of Eiden, the Examiner looks to Eiden for a teaching of the floor covering having a profile with elevations and recesses with the average spacing between profile peaks in the centerline of more than about 200 μm and less than about 1000 μm and the difference in height between the elevations and the recesses of from about 20 μm to about 200 μm , as required by claim 1.

In the Amendment and Response filed on November 9, 2005, Applicants argued the purpose of forming the elevations and recesses in Eiden (permitting drainage of liquids from the upper surface of the floor covering) is different than the purpose of the presently claimed elevations and recesses (to improve soiling behavior in combination with the substance capable of migration) and optimizing the elevations and recesses of

Eiden to improve drainage would not necessarily yield the presently claimed ranges of spacing and height.

Below the middle of page 13 of the latest Office Action, the Examiner argues that “the elevations and recesses formed in the floor covering of Eiden improve the soiling behavior as well as permit drainage of liquids from the upper surface” since “the liquids being drained ... are *dirty* liquids such as grease, oil, water and the like.” (Italics in original.) While Applicants agree that Eiden does teach a means of improving soiling behavior, the soiling behavior addressed by Eiden is not the soiling behavior of the present invention.

Eiden is concerned about removing dirty liquids. The present invention is directed to repelling dirt from the surface with a substance that is incompatible with the matrix of the floor covering and that migrates to the surface of the floor covering. See paragraphs 0014 and 0015 of the specification. The elevations and recesses specified in claim 1 improve this dirt-repelling behavior. See paragraphs 0050 to 0053 of the specification.

Therefore, while both Eiden and the present invention are both directed to the general category of improving soiling behaviors, the soiling behaviors addressed are quite different and optimizing the conditions for the one does not necessarily optimize the conditions for the other. As a consequence Applicants repeat and incorporate their arguments of the Amendment and Response filed on November 9, 2005.

Near the top of page 14 of the latest Office Action, the Examiner states that “the optimum ranges for the spacing and the height of the elevations and recesses would be readily determined through routine experimentation by one having ordinary skill in the

art depending on the desired end results.” However, since person having ordinary skill would be modifying the invention of Eiden, it is the purpose of Eiden that he would be optimizing. Unless that is some reason to contradict the teachings of Eiden, one must assume that optimizing the ranges of Eiden would yield his preferred difference in height between the elevations and the recesses of 1.3 to 2.0 mm and the spacing between peaks of 25 mm. These ranges fall outside those claimed in present claim 1. Therefore, claim 1 and claims 7, 8, 10 and 12, dependent thereon, are not obvious over Kupitis in view of Eiden.

The rejection of claims 16, 19 and 20 over Kupitis in view of Eiden and in view of Hiragami et al. US Patent No. 4,501,783 (“Hiragami”) has been maintained in paragraph 5 on page 2 of the latest Office Action for the reasons set forth in paragraph 9 on pages 6 and 7 of the previous Office Action. Claims 16, 19 and 20 depend directly or indirectly on claim 1. Therefore, they are allowable for the reasons that claim 1 is allowable, as discuss above.

Claims 3 to 5, 13, 14, 23, 26 and 28 to 34 have been rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement in paragraph 7 on page 3 of the latest Office Action. The Examiner takes the position that the phrase “at room temperature” is new matter and the specification, as filed, does not provide support. While the phrase “at room temperature” does not appear, *ipsis verbis*, in the specification, paragraph 0015, as filed, states

“at least one substance migrates slowly, but continuously from the floor covering to the surface of the floor covering and thus forms a continuously renewing protection, even when the substance migrating to the surface is worn or abraded off by walking on the floor covering.”

The “substance migrates ... continuously ... even when ... the surface is worn or abraded off by walking on the floor covering.” Since the floor covering is walked on at room temperature, the substance, which migrates continuously, migrates at room temperature and the phrase “at room temperature” is supported by the specification, as filed. Therefore, the rejection of claims 3 to 5, 13, 14, 23, 26 and 28 to 34 under Section 112 has been overcome.

Claims 3, 4, 26 and 31 have been rejected as being anticipated by Marchal US Patent No. 4,886,708 (“Marchal”) in paragraph 9 on pages 3 and 4 of the latest Office Action. The Examiner takes the position that column 3, lines 20 to 25 and 65 to 68, teach the plasticizer to be in an amount of at least 12 wt% based on PVC, as required by claim 23. However, the cited passages only teach that 100 parts of PVC plastisol is used in the examples. There is no teaching in Marchal as to what the plasticizer content in the plastisol is. Therefore, Marchal does not anticipate claim 26 or claims 3, 4 or 31, which depend on claim 26.

Further, with regard to claim 3, the Examiner indicates that column 1, lines 8 to 12, of Marchal teaches a homogenous floor covering. The cited passage states that the “invention relates to a process for the manufacture of plastisol based synthetic coverings (e.g., floor or wall coverings) having improved resistance to soiling.” This does not teach a homogenous floor covering, only that the floor covering includes a plastisol. As clearly taught at column 1, lines 33 to 44 and 62 to 66; column 2, lines 35 to 40; and claim 13, the invention of Marchal is directed to a floor covering having a plastisol wear layer and a support. Therefore, claim 3 is allowable over Marchal for this reason as well.

Claims 3, 4, 13, 14, 23, 26 and 31 to 34 have been rejected as being anticipated by Hiragami in paragraph 10 on pages 4 and 5 of the latest Office Action. The Examiner indicates that the amount of the substance capable of migration being in excess of its compatibility in the composition is taught at column 3, lines 19 to 22 and 32 to 45. However, these passages discuss “the particles [being] highly compatible with the matrix layer,” the “particles [being] dispersed or distributed throughout the entire thickness of the matrix layer, so that even when the matrix layer gradually wears, internal particles become exposed in succession” and “the particles exhibit[ing] good compatibility with the matrix layer during processing.” There is no teaching or suggestion in the cited passages or anywhere else Hiragami of the particles or any other component migrating. Therefore, claim 26 and claims 3, 4, 13, 14, 23 and 31 to 34, dependent thereon, are allowable over Hiragami.

Further, with regard to claim 3, the Examiner indicates that column 1, lines 57 to 68, of Hiragami teaches a homogenous floor covering. However, the cited passage discusses a “polyvinyl chloride matrix layer” and not a homogenous floor covering. See the Figure and column 3, lines 6 to 9, where the PVC matrix layer 1 overlies the backing 3. Therefore, claim 3 is allowable over Hiragami for this reason as well.

In paragraph 12 on page 5 of the latest Office Action, the Examiner has rejected claim 5 as being obvious over either Marchal or Hiragami in view of Berenger US Patent No. 6,013,329 (“Berenger”). She relies on Marchal and Hiragami as discussed above. Therefore, claim 5 is allowable for the reasons discussed above with regard to claim 26..

Further, the Examiner relies on Berenger for a teaching of the K-value specified in claim 5. She states “Berenger teaches that it is old and well-known in the art to have a

PVC coating wherein the PVC has a K-value between 55 and 85 (see col. 3, lines 27-29) for the purpose of manufacturing a floor covering with a plastic surface finish which is much glossier, thereby in particular dispensing with any application of one or more surface varnishes.” However, at column 2, lines 20 to 27, Berenger states:

“this improvement has two consequences:

...

... it makes it possible to obtain plastic surface finishes which are much glossier, thereby in particular dispensing with any application of one or more surface varnishes.”

The improvement referred to is “to reduce the deplasticization in a gelling oven by using, in particular, infrared gas burners.” See column 2, lines 8 to 10. Berenger does not teach or suggest dispensing with surface varnishes by using PVC with the specified K-value. Berenger does not state why he selected the specified K-value. Therefore, there is no suggestion to combine Berenger with either Marchal or Hiragami, and claim 5 is allowable for this reason as well.

Claims 28 and 29 have been rejected in paragraphs 13 and 14 on pages 6 and 7 of the latest Office Action as being obvious over either Marchal or Hiragami in view of Kondo. The Examiner relies on Marchal and Hiragami for the teachings discussed above. Therefore, claims 28 and 29 are allowable for the reasons discussed above with regard to claim 26.

Further, the Examiner relies on Kondo for a teaching that it is old and well-known to use wax-like substances in a surface layer of a floor covering for the purpose of improving lubricity as well as flaw resistance, stain resistance and abrasion resistance. However, Kondo does not teach or suggest that the wax-like substances migrate at room

temperature. In fact, Kondo teaches away from the present invention at page 4, lines 21 to 23, stating:

“the content if larger than 10% by weight would cause not only reduced stain resistance but also reduced mechanical properties, heat resistance and weather resistance, thus also causing a difficulty in obtaining a satisfactory floor material.”

Therefore, claims 28 and 29 are allowable for this reason as well.

In paragraph 15 on page 8 of the latest Office Action, claim 30 is rejected as being obvious over either Marchal or Hiragami in view of Kondo and further in view of Apikos US Patent No. 3,518,215 (“Apikos”). The Examiner relies on Marchal, Hiragami and Kondo for the teachings discussed above. Therefore, claim 30 is allowable for the reasons discussed above with regard to claims 26, 28 and 29.

Further, the Examiner relies on Apikos for a teaching that it is old and well-known to have an amide wax as the substance capable of migration in a surface layer for the purpose of providing temporary surface protection against abrasion, dirt and other damage occurring in storage and handling. However, the invention of Apikos is

“[s]trippable coatings ... wherein it is desirable to provide temporary surface protection against abrasion, rust, dirt and other damage occurring in storage and handling.”

(Column 1, lines 29 to 32.) It is the strippable coating and not the amide that provides the protection.

“The concentration [of the amide] must be sufficient to impart strippability without completely destroying the bond between the surface and the coating.”

(Column 2, lines 38 to 41.) The purpose of the amide is to provide strippability of the coating and not stain and dirt resistance. Apikos teaches away from the present invention at column 2, lines 51 to 59, stating:

“Higher concentrations, while operable, are accompanied by substantial amine or amide migration to the surface of the coating. This migration may totally destroy the adhesive bond, or provide an unattractive coating appearance and feel.”

Apikos teaches that higher concentrations, which lead to migration and an unattractive coating appearance, must be avoided. Therefore, claim 30 is allowable over the combination with Apikos for this reason as well.

Claims 13, 14, 23 and 32 to 34 are rejected in paragraph 16 on pages 9 and 10 of the latest Office Action as being obvious over Marchal in view of Hiragami. These claims depend, directly or indirectly, on claim 26 and are allowable over Marchal and Hiragami for the reasons discussed above with respect to claim 26.

Claim 9 is rejected as being obvious over either Marchal or Hiragami in view of Kondo in paragraphs 17 and 18 on pages 10 to 12 of the latest Office Action. As discussed previously, there is no teaching in Marchal as to what the plasticizer content in the plastisol is or in Hiragami of any component migrating. There is no teaching in Kondo of the wax migrating. To the contrary, at page 4, lines 11 to , Kondo teaches that

“When a wax is contained in the surface layer 1 in this way, the wax is exposed on the surface in a dispersed state so that a polished surface gloss is obtained. Also, even when the surface gloss of the surface layer 1 is reduced due to walking and the like, the surface is slightly rubbed down and a new polished surface with dispersed wax is exposed.”

Therefore, rather than the wax migrating to the surface, Kondo teaches wearing down the surface layer to expose additional wax that has been dispersed in the surface layer.

Therefore, claim 9 is allowable for these reasons.

Since all of the rejections have been met, Attorney for Applicants submits that the present claims are in a condition for allowance. Therefore, early consideration and allowance are respectfully requested.

Respectfully submitted,

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Date

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